

ORDINANCE _____

AN ORDINANCE relating to the Seattle Fuel Gas Code amending Section 22.420.010 and adopting by reference Chapters 2 through 8 of the 2009 International Fuel Gas Code, and amending certain of those chapters; adopting a new Chapter 1 for the Seattle Fuel Gas Code related to administration, permitting and enforcement; and repealing Sections 2-8 of Ordinance 122532.

BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

Section 1. Section 22.420.010 of the Seattle Municipal Code is amended as follows:

22.420.010 Adoption of International Fuel Gas Code.

The Seattle Fuel Gas Code consists of: (1) the following portions of the ((2006)) 2009 edition of the International Fuel Gas Code published by the International Code Council, as amended by City Council by ordinance: Chapters 2-8, together with the adopted amendments and additions ((and errata published by the International Code Council after February 1, 2006)), and (2) Chapter 1 relating to administration, permitting and enforcement adopted by City Council by ordinance. One copy of the ((2006)) 2009 International Fuel Gas Code is filed with the City Clerk in C.F. ((308939)) _____.

Section 2. The following chapter is adopted as Chapter 1 of the Seattle Fuel Gas Code to read as follows:

CHAPTER 1

ADMINISTRATION

SECTION 101

TITLE

101.1 Title. These regulations shall be known as the “Seattle Fuel Gas Code,” may be cited as such, and are referred to herein as “this code.” All references to the *International Fuel Gas Code* contained in this code mean the *Seattle Fuel Gas Code*.

SECTION 102

PURPOSE

102.1 Purpose. The purpose of this code is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation, and maintenance or use of heating, ventilating, cooling, refrigeration systems, incinerators and other miscellaneous heat-producing appliances within the City.

The purpose of this code is to provide for and promote the health, safety and welfare of the general public, and not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefited by the terms of this code.

SECTION 103

APPLICABILITY AND SCOPE

103.1 Applicability. The provisions of this code apply to the erection, installation, alteration, repair, relocation, replacement, addition to, use or maintenance of fuel-gas piping systems, fuel-gas utilization equipment and related accessories within the City. The design and testing of equipment regulated by this code are subject to the approval of the code official.

Exceptions:

1 1. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses)
2 not more than three stories above grade plane with a separate means of egress and their accessory
3 structures shall comply with the *International Residential Code*.

4 2. The standards for liquefied petroleum gas installations are the 2008 edition of NFPA 58
5 (Liquefied Petroleum Gas Code) and the 2009 edition of ANSI Z223.1/NFPA 54 (National Fuel
6 Gas Code), as amended.
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8 **103.2 Applicability of Seattle Fuel Gas Code.** A mechanical permit application shall be
9 considered under the Seattle Fuel Gas, Mechanical and Energy codes in effect on the date a
10 complete mechanical permit application is submitted or on a date as otherwise required by law.
11 A mechanical permit application is complete if it complies with all the requirements of Section
12 115.
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14 **103.3 Alterations.** Additions, alterations, repairs and replacement of equipment or systems shall
15 comply with the provisions for new equipment and systems except as otherwise provided in
16 Section 104 of this code.
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18 **103.4 Internal consistency.** Where, in any specific case, different sections of this code specify
19 different materials, methods of construction or other requirements, the most restrictive governs.
20 Where there is a conflict between a general requirement and a specific requirement, the specific
21 requirement is applicable.
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23 **103.5 Referenced codes and standards.** The codes and standards referenced in this code are
24 part of the requirements of this code to the prescribed extent of each such reference. Where
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differences occur between provisions of this code and referenced codes and standards, the provisions of this code apply.

Exception: Where enforcement of a code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and manufacturer's instructions apply.

103.6 Appendices. Provisions in the *International Fuel Gas Code* appendices do not apply unless specifically adopted.

103.7 Metric units. Wherever in this ordinance there is a conflict between metric units of measurement and English units, the English units govern.

103.8 References to other codes. Whenever an International, National or Uniform Code is referenced in this code, it means the Seattle edition of that code, including local amendments. References to the "Building Code", "Mechanical", "Fire Code", "Residential Code" and "Plumbing Code" mean the Seattle editions of those codes.

SECTION 104

APPLICATION TO EXISTING MECHANICAL SYSTEMS

104.1 Additions, alterations or repairs. Additions, alterations, renovations or repairs may be made to any mechanical system without requiring the existing mechanical system to comply with all the requirements of this code, if the addition, alteration, renovation or repair conforms to the standards required for a new mechanical system. Additions, alterations, renovations or repairs shall not cause an existing system to become unsafe, unhealthy or overloaded.

1 Minor additions, alterations, renovations, and repairs to existing mechanical systems may be
2 installed in accordance with the law in effect at the time the original installation was made, if
3 approved by the code official.

4 **104.2 Existing installations.** Mechanical systems lawful at the time of the adoption of this code
5 may continue their use, be maintained or repaired, be converted to another type of fuel, or have
6 components replaced if the use, maintenance, repair, conversion of fuel, or component
7 replacement is done in accordance with the basic original design and location, and no hazard to
8 life, health or property has been or is created by such mechanical system.

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10 **104.3 Changes in building occupancy.** Mechanical systems that are a part of a building or
11 structure undergoing a change in use or occupancy as defined in the Building Code shall comply
12 with all requirements of this code that are applicable to the new use or occupancy.

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14 **104.4 Maintenance.** All mechanical systems, materials, equipment, appurtenances and all parts
15 thereof shall be maintained in proper operating condition in accordance with the original design
16 and in a safe and hazard-free condition. All devices or safeguards that were required by a code in
17 effect when the mechanical system was installed shall be maintained in conformance with the
18 code edition under which installed. The owner or the owner's designated agent is responsible for
19 maintenance of mechanical systems and equipment. To determine compliance with this
20 subsection, the code official may cause a mechanical system or equipment to be reinspected.

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23 The fire chief and the code official each have authority to obtain compliance with the
24 requirements of this subsection.

Exception: The code official may modify the requirements of this section where all or a portion of the building is unoccupied.

104.5 Moved buildings. Building or structures moved into or within the City shall comply with standards adopted by the code official. No building shall be moved into or within the City unless, prior to moving, the code official has inspected the building for compliance with this code and the permit holder has agreed to correct all deficiencies found and has been issued a building permit for the work. A bond or cash deposit in an amount sufficient to abate or demolish the building shall be posted prior to issuance of a permit. See Section 117 for information required on plans. Any moved building that is not in complete compliance with standards for moved buildings within 18 months from the date of permit issuance and is found to be a public nuisance may be abated.

104.6 Historic buildings and structures. The code official may modify the specific requirements of this code as it applies to landmarks and require in lieu thereof alternate requirements that, in the opinion of the code official, will result in a reasonable degree of safety to the public and the occupants of those buildings.

For purposes of this section a landmark is a building or structure that has been nominated for designation or has been designated for preservation by the City Landmarks Preservation Board, or that has been designated for preservation by the State of Washington, or has been listed or determined eligible to be listed in the National Register of Historic Places, or is a structure in a landmark or special review district subject to a requirement to obtain a certificate of approval before making a change to the external appearance of the structure.

SECTION 105

ALTERNATE MATERIALS AND METHODS OF CONSTRUCTION

105.1 Alternate materials and methods. This code does not prevent the use of any material, design or method of construction not specifically allowed or prohibited by this code, provided the alternate has been approved and its use authorized by the code official. The code official may approve an alternate, provided the code official finds that the proposed alternate complies with the provisions of this code and that the alternate, when considered together with other safety features of the building or other relevant circumstances, will provide at least an equivalent level of strength, effectiveness, fire resistance, durability, safety and sanitation. The code official may require that sufficient evidence or proof be submitted to reasonably substantiate any claims regarding the use or suitability of the alternate. The code official may, but is not required to, record the approval of alternates and any relevant information in the files of the code official or on the approved construction documents.

SECTION 106

MODIFICATIONS

106.1 Modifications. The code official may modify the provisions of this code for individual cases if the code official finds: (1) there are practical difficulties involved in carrying out the provisions of this code; (2) the modification is in conformity with the intent and purpose of this code; and (3) the modification will provide a reasonable level of strength, effectiveness, fire resistance, durability, safety and sanitation when considered together with other safety features of the building or other relevant circumstances. The code official may, but is not required to, record

the approval of modifications and any relevant information in the files of the code official or on the approved construction documents.

SECTION 107

TESTS

107.1 Tests. Whenever there is insufficient evidence of compliance with the provisions of this code or evidence that any material or method of construction does not conform to the requirements of this code, the code official may require tests as proof of compliance, to be made at no expense to the City. Test methods shall be as specified in this code or by other recognized test standards. If there are no recognized and accepted test methods for the proposed alternate, the code official shall determine the test procedures. All tests shall be made by an approved agency. Reports of such tests shall be retained by the code official for the period required for retention of public records.

SECTION 108

ORGANIZATION AND DUTIES OF CODE OFFICIAL

108.1 Jurisdiction. The Department of Planning and Development is authorized to administer and enforce this code. Enforcement of Chapters 4 and 7 are the primary responsibility of the Director of Public Health. The Department of Planning and Development is under the administrative and operational control of the Director, who is the code official.

108.2 Designees. The code official may appoint such officers, inspectors, assistants and employees as are authorized from time to time. The code official may authorize such employees and other agents as may be necessary to carry out the functions of the code official.

1 **108.3 Right of entry.** With the consent of the owner or occupier of a building or premises, or
2 pursuant to a lawfully issued warrant, the code official may enter a building or premises at any
3 reasonable time to perform the duties imposed by this code.

4 **108.4 Liability.** Nothing in this code is intended to be nor shall be construed to create or form
5 the basis for any liability on the part of the City, or its officers, employees or agents, for any
6 injury or damage resulting from the failure of equipment to conform to the provisions of this
7 code, or by reason or as a consequence of any inspection, notice, order, certificate, permission or
8 approval authorized or issued or done in connection with the implementation or enforcement of
9 this code, or by reason of any action or inaction on the part of the City related in any manner to
10 the enforcement of this code by its officers, employees or agents.

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12 This code shall not be construed to lessen or relieve the responsibility of any person owning,
13 operating or controlling any equipment, building or structure for any damages to persons or
14 property caused by defects, nor shall the Department of Planning and Development or the City of
15 Seattle be held to have assumed any such liability by reason of the inspections authorized by this
16 code or any permits or certificates issued under this code.
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19 **108.5 Cooperation of other officials and officers.** The code official may request, and shall
20 receive so far as is required in the discharge of the code official's duties, the assistance and
21 cooperation of other officials of the City of Seattle.
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23 **108.6 Responsibility for compliance.** Compliance with the requirements of this code is the
24 obligation of the owner of the building, structure or premises, the duly authorized agent of the
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owner, and other persons responsible for the condition or work, and not of the City or any of its officers, employees or agents.

SECTION 109

UNSAFE EQUIPMENT AND HAZARD CORRECTION ORDER

109.1 Unsafe equipment. Any equipment regulated by this code that is found to be unsafe is hereby declared to be a public nuisance and may be abated.

109.2 Emergency order. Whenever the code official finds that any equipment regulated by this code is in such a dangerous and unsafe condition as to constitute an imminent hazard to life or limb, the code official may issue an emergency order directing that the equipment be restored to a safe condition by a date certain. The order may also require that the building, structure or premises, or portion thereof, containing the equipment be vacated within a reasonable time to be specified in the order. In the case of extreme danger, the order may specify immediate vacation of the building, structure or premises, or may authorize immediate disconnection of the utilities or energy source.

109.2.1 Service of emergency order. The order shall be posted on the premises or personally served on the owner of the building or premises or any person responsible for the condition. The order shall specify the time for compliance.

109.2.2 Effect of emergency order. No person may occupy a building, structure or premises, or portion thereof, after the date on which the building is required to be vacated until the building, structure or premises, or portion thereof, is restored to a safe condition as

required by the order and this code. It is a violation for any person to fail to comply with an emergency order issued by the building official.

109.3 Hazard correction order. Whenever the code official finds that unsafe equipment exists, the code official may issue a hazard correction order specifying the conditions causing the equipment to be unsafe and directing the owner or other person responsible for the unsafe equipment to correct the condition by a date certain. In lieu of correction, the owner may submit a report or analysis to the code official analyzing said conditions and establishing that the equipment is, in fact, safe. The code official may require that the report or analysis be prepared by a licensed engineer.

109.3.1 Service of hazard correction order. The order shall be posted on the premises or personally served on the owner of the building or premises or any person responsible for the condition and shall specify the time for compliance.

109.3.2 Effect of hazard correction order. It is a violation for any person to fail to comply with a hazard correction order as specified in this subsection.

SECTION 110

ADMINISTRATIVE REVIEW

110.1 Administrative review by the building official. Applicants may request administrative review by the building official of decisions or actions pertaining to the administration and enforcement of this code. Requests shall be addressed to the building official.

110.2 Administrative review by the Construction Codes Advisory Board. Applicants may request CCAB review of decisions or actions pertaining to the application and interpretation of

1 this code by the Construction Codes Advisory Board (CCAB), except for stop work orders,
2 notices of violations and revocations of permits. The review will be performed by three or more
3 members of the Construction Codes Advisory Board, chosen by the Board Chair. The Chair shall
4 consider the subject of the review and members' expertise when selecting members to conduct a
5 review. The decision of the review panel is advisory only; the final decision is made by the code
6 official.
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8 **SECTION 111**

9 **ENFORCEMENT, VIOLATIONS AND PENALTIES**

10 **111.1 Violations.** It is a violation of this code for any person to:
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- 12 1. install, erect, construct, enlarge, alter, repair, replace, remodel, move, improve, remove,
13 convert or demolish, equip, occupy, use or maintain any mechanical system or equipment or
14 cause or permit the same to be done in the City, contrary to or in violation of any of the
15 provisions of this code.
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- 17 2. use any material or install any device, appliance or equipment that is subject to this code and
18 has not been approved by the code official.
- 19 3. knowingly aid, abet, counsel, encourage, hire, induce or otherwise procure another to violate
20 or fail to comply with this code.
- 21 4. violate or fail to comply with any final order issued by the code official pursuant to the
22 provisions of this code.
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1 5. remove, mutilate, destroy or conceal any notice or order issued or posted by the code official
2 pursuant to the provisions of this code, or any notice or order issued or posted by the code
3 official in response to a natural disaster or other emergency.

4 6. conduct work under a permit without requesting an inspection as required by Section 119.

5 **111.2 Notice of violation.** If, after investigation, the code official determines that standards or
6 requirements of this code have been violated or that orders or requirements have not been
7 complied with, the code official may serve a notice of violation upon the owner, agent, or other
8 person responsible for the action or condition. The notice of violation shall state the standards or
9 requirements violated, shall state what corrective action, if any, is necessary to comply with the
10 standards or requirements, and shall set a reasonable time for compliance.

11 **111.2.1 Service of notice of violation.** The notice shall be served upon the owner, agent or other
12 responsible person by personal service or regular first class mail addressed to the last known
13 address of such person, or if no address is available after reasonable inquiry, the notice may be
14 posted in a conspicuous place on the premises. The notice may also be posted if served by
15 personal service or first class mail. Nothing in this section limits or precludes any action or
16 proceeding to enforce this code, and nothing obligates or requires the code official to issue a
17 notice of violation prior to the imposition of civil or criminal penalties.

18 **111.2.2 Review of notice of violation by the code official.**

19 **111.2.2.1 Request for review.** Any person affected by a notice of violation issued pursuant to
20 Section 111.2 may obtain a review of the notice by making a request in writing within ten days
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1 after service of the notice. When the last day of the period computed is a Saturday, Sunday, or
2 City holiday, the period runs until 5 p.m. of the next business day.

3 **111.2.2.2 Review procedure.** The review shall occur not less than ten nor more than 20 days
4 after the request is received by the code official unless otherwise agreed to by the person
5 requesting the review. Any person affected by the notice of violation may submit additional
6 information to the code official.
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8 The review shall be made by a representative of the code official who will review any additional
9 information that is submitted and the basis for issuance of the notice of violation. The reviewer
10 may request clarification of the information received and a site visit.
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12 **111.2.2.3 Decision.** After the review, the code official shall:

- 13 1. Sustain the notice;
- 14 2. Withdraw the notice;
- 15 3. Continue the review to a date certain; or
- 16 4. Amend the notice.
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18 **111.2.2.4 Order.** The code official shall issue an order containing the decision within 15 days of
19 the date that the review is completed and shall cause the order to be mailed by regular first class
20 mail to the persons requesting the review and the persons named on the notice of violation,
21 addressed to their last known address.
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23 **111.3 Stop work orders.** The code official may issue a stop work order whenever any work is
24 being done contrary to the provisions of this code, or in the event of dangerous or unsafe
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conditions related to equipment or construction. The stop work order shall identify the violation and may prohibit work or other activity on the site.

111.3.1 Service of stop work order. The code official may serve the stop work order by posting it in a conspicuous place at the site, if posting is physically possible. If posting is not physically possible, then the stop work order may be served in the manner set forth in Revised Code of Washington (RCW) 4.28.080 for service of a summons or by sending it by first class mail to the last known address of: the property owner, the person doing or causing the work to be done, or the holder of a permit if work is being stopped on a permit. For purposes of this section, service is complete at the time of posting or of personal service, or if mailed, three days after the date of mailing. When the last day of the period so computed is a Saturday, Sunday or city holiday, the period runs until 5:00 p.m. on the next business day.

111.3.2 Effective date of stop work order. Stop work orders are effective when posted, or if posting is not physically possible, when one of the persons identified in Section 111.3.1 is served.

111.3.3 Review of stop work orders by the code official.

111.3.3.1 Request for review. Any person aggrieved by a stop work order may obtain a review of the order by delivering to the code official a request in writing within two business days of the date of service of the stop work order.

111.3.3.2 Review procedure. The review shall occur within two business days after receipt by the code official of the request for review unless the requestor agrees to a longer time. Any person affected by the stop work order may submit additional information to the code official for

1 consideration as part of the review at any time prior to the review. The review will be made by a
2 representative of the code official who will review all additional information received and may
3 also request a site visit.

4 **111.3.3.3 Decision.** After the review, the code official may:

- 5 a. Sustain the stop work order;
- 6 b. Withdraw the stop work order;
- 7 c. Modify the stop work order; or
- 8 d. Continue the review to a date certain.

10 **111.3.3.4 Order.** The code official shall issue an order of the code official containing the
11 decision within two business days after the review and shall cause the order to be sent by first
12 class mail to the person or persons requesting the review, any person on whom the stop work
13 order was served, and any other person who requested a copy before issuance of the order.

15 **111.4 Authority to disconnect utilities in emergencies.** The code official has the authority to
16 disconnect fuel-gas utility service or energy supplies to a building, structure, premises or
17 equipment regulated by this code in case of emergency where necessary to eliminate an
18 immediate hazard to life or property. The code official may enter any building or premises to
19 disconnect utility service. The code official shall, whenever possible, notify the serving utility,
20 the owner and the occupant of the building, structure or premises of the decision to disconnect
21 prior to taking such action, and shall notify the serving utility, owner and occupant of the
22 building, structure or premises in writing of such disconnection immediately thereafter.
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1 **111.5 Authority to condemn equipment.** Whenever the code official determines that any
2 equipment or portion thereof regulated by this code is hazardous to life, health or property, the
3 code official shall order in writing that such equipment either be disconnected, removed or
4 restored to a safe or sanitary condition, as appropriate. The written notice shall fix a date certain
5 for compliance with such order. It is a violation for any person to use or maintain defective
6 equipment after receiving such notice.
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8 When any equipment or installation is to be disconnected, the code official shall give written
9 notice of such disconnection and causes therefor within 24 hours to the serving utility, the owner
10 and the occupant of the building, structure or premises. When any equipment is maintained in
11 violation of this code, and in violation of a notice issued pursuant to the provisions of this
12 section, the code official shall institute any appropriate action to prevent, restrain, correct or
13 abate the violation.
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15 **111.6 Connection after order to disconnect.** No person shall make connections from any
16 energy, fuel or power supply nor supply energy or fuel to any equipment regulated by this code
17 that has been disconnected or ordered to be disconnected by the code official, or the use of which
18 has been ordered to be discontinued by the code official until the code official authorizes the
19 reconnection and use of such equipment.
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21 **111.7 Civil penalties.** Any person violating or failing to comply with the provisions of this code
22 is subject to a cumulative civil penalty in an amount not to exceed \$500 per day for each
23 violation from the date the violation occurs or begins until compliance is achieved. In cases
24 where the code official has issued a notice of violation, the violation will be deemed to begin, for
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1 purposes of determining the number of days of violation, on the date compliance is required by
2 the notice of violation.

3 **111.8 Enforcement in Municipal Court.** Civil actions to enforce this chapter shall be brought
4 exclusively in Seattle Municipal Court, except as otherwise required by law or court rule. In any
5 civil action for a penalty, the City has the burden of proving by a preponderance of the evidence
6 that a violation exists or existed; the issuance of a notice of violation or of an order following a
7 review by the Code official is not itself evidence that a violation exists.
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9 **111.9 Judicial review.** Because civil actions to enforce this code must be brought exclusively
10 in Seattle Municipal Court pursuant to Section 111.8, orders of the code official, including
11 notices of violation issued under this chapter are not subject to judicial review pursuant to
12 chapter 36.70C Revised Code of Washington (RCW).
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14 **111.10 Alternative criminal penalty.** Anyone who violates or fails to comply with any notice
15 of violation or order issued by the code official pursuant to this code or who removes, mutilates,
16 destroys or conceals a notice issued or posted by the code official shall, upon conviction thereof,
17 be punished by a fine of not more than \$5000 or by imprisonment for not more than 365 days, or
18 by both such fine and imprisonment for each separate violation. Each day's violation shall
19 constitute a separate offense.
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21 **111.11 Additional relief.** The code official may seek legal or equitable relief to enjoin any acts
22 or practices and abate any condition when necessary to achieve compliance.
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24 **SECTION 112**

25 **RECORDING OF ORDERS AND NOTICES**

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112.1 Recording. The code official may record a copy of any order or notice with the Department of Records and Elections of King County.

SECTION 113

RULES OF THE CODE OFFICIAL

113.1 Authority. The code official has authority to issue interpretations of this code and to adopt and enforce rules and regulations supplemental to this code as may be deemed necessary to clarify the application of the provisions of this code. Such interpretations, rules and regulations shall be in conformity with the intent and purpose of this code.

113.2 Procedure for adoption of rules. The code official shall promulgate, adopt and issue rules according to the procedures specified in the Administrative Code, Chapter 3.02 of the Seattle Municipal Code.

SECTION 114

CONSTRUCTION CODES ADVISORY BOARD

114.1 CCAB committee. A committee of the Construction Codes Advisory Board may examine proposed administrative rules, appeals and amendments relating to this code and related provisions of other codes and make recommendations to the code official and to the City Council for changes in this code. The committee will be called on as needed by the Construction Codes Advisory Board.

SECTION 115

PERMITS

115.1 Permits required. Except as otherwise specifically provided in this code, a permit shall be obtained from the code official prior to each installation, alteration, repair, replacement or remodel of any equipment or mechanical system regulated by this code. A separate mechanical permit is required for each separate building or structure.

115.2 Work exempt from permit. A mechanical permit is not required for the work listed below.

1. Any portable heating appliance, portable ventilating equipment, or portable cooling unit, if the total capacity of these portable appliances does not exceed 40 percent of the cumulative heating, cooling or ventilating requirements of a building or dwelling unit and does not exceed 3 kW or 10,000 Btu input.

2. Any closed system of steam, hot or chilled water piping within heating or cooling equipment regulated by this code.

3. Minor work or the replacement of any component part of a mechanical system that does not alter its original approval and complies with other applicable requirements of this code.

115.2 Compliance required. All work shall comply with this code, even where no permit is required.

115.3 Flood hazard areas. In addition to the permit required by this section, all work to be performed in areas of special flood hazard as defined in Chapter 25.06 of the Seattle Municipal Code, are subject to additional standards and requirements set forth in Chapter 25.06, the Seattle Floodplain Development Ordinance.

115.4 Emergency repairs. In the case of an emergency, the installation, alteration or repair of any refrigeration system or equipment may be made without a permit, provided that application for a permit is made within the later of 24 hours or one working day from the time when the emergency work was started.

SECTION 116

APPLICATION FOR PERMIT

116.1 Application. To obtain a permit, the applicant shall first file an application in writing on a form furnished by the code official or in another format determined by the code official. Every such application shall:

1. Identify and describe the work to be covered by the permit for which application is made.
2. Describe the land on which the proposed work is to be done by legal description, property address or similar description that will readily identify and definitely locate the proposed building or work.
3. Provide the contractor's business name, address, phone number and current contractor registration number (required if contractor has been selected).
4. Be accompanied by construction documents, including plans, diagrams, computations and specifications, equipment schedules and other data as required in Sections 116.2 and 116.3.
5. State the valuation of the mechanical work to be done. The valuation of the mechanical work is the estimated current value of all labor and material, whether actually paid for or not, for which the permit is sought.

1 6. Be signed by the owner of the property or building, or the owner's authorized agent, who may
2 be required to submit evidence to indicate such authority.

3 7. Give such other data and information as may be required by the code official.

4 8. Indicate the name of the owner and contractor and the name, address and phone number of a
5 contact person.

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7 **116.2 Construction documents.** Construction documents shall be submitted in one or more sets
8 with each application for a permit, or shall be submitted in electronic format determined by the
9 code official. The code official may require plans, computations and specifications to be prepared
10 and designed by an engineer or architect licensed by the state to practice as such. Projects having
11 a total mechanical valuation of \$50,000 or larger shall have a mechanical engineering stamp and
12 signature on each sheet.

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14 **Exception:** A mechanical engineer's stamp or submission of construction documents is not
15 required if the code official finds that the nature of the work applied for is such that review of
16 construction documents is not necessary to obtain compliance with this code.

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18 **116.3 Information on construction documents.**

19 **116.3.1 Clarity of plans.** Plans shall be drawn to a clearly indicated and commonly accepted
20 scale upon substantial paper such as blueprint quality or standard drafting paper. Tissue paper,
21 posterboard or cardboard will not be accepted. The plans shall be of microfilm quality and
22 limited to a minimum size of 18 inches by 18 inches and a maximum size of 41 inches by 54
23 inches. Plans and specifications shall be of sufficient clarity to show that the proposed
24 installation will conform to the provisions of this code and to the provisions of all applicable
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1 laws, ordinances, rules, regulations and orders. Plans may be submitted in electronic format as
2 determined by the code official.

3 **116.3.2 Fire-resistive notes.** The code official may require that plans for buildings more than
4 two stories in height of other than Group R-3 and Group U occupancies indicate how required
5 structural and fire-resistive integrity will be maintained where a penetration will be made for
6 electrical, mechanical, plumbing and communication conduits, pipes and similar systems.
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8 **116.3.3 Information required on plans .** The plans or specifications shall show the following:

- 9 1. Layout for each floor with dimensions of all working spaces and a legend of all symbols used.
- 10 2. Location, size and material of all piping.
- 11 3. Location, size and materials of all air ducts, air inlets and air outlets.
- 12 4. Location of all fans, warm-air furnaces, boilers, absorption units, refrigerant compressors and
- 13 condensers and the weight of all pieces of such equipment weighing 200 pounds or more.
- 14 5. Rated capacity or horsepower and efficiency rating of all boilers, warm-air furnaces, heat
- 15 exchangers, blower fans, refrigerant compressors and absorption units. See also the *Washington*
- 16 *State Energy Code with Seattle Amendments.*
- 17 6. Location, size and material of all combustion products vents and chimneys.
- 18 7. Location and area of all ventilation and combustion air openings and ducts.
- 19 8. Location of all air dampers and fire shutters.
- 20 9. The first sheet of each set of plans and specifications shall show the address of the proposed
- 21 work and the name and address of the owner or lessee of the premises.
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1 10. Architectural drawings, typical envelope cross sections and other drawings or data may be
2 required to support system sizing calculations or other thermal requirements of this code or the
3 *Washington State Energy Code with Seattle Amendments*.

4 **SECTION 117**

5 **APPLICATION REVIEW AND PERMIT ISSUANCE**

6 **117.1 Issuance.**

7
8 **117.1.1 General.** The application and construction documents shall be reviewed by the code
9 official. The construction documents may be reviewed by other departments of the City to check
10 compliance with the laws and ordinances under their jurisdiction.

11
12 **117.1.2 Decision and issuance of permit.** If the code official finds that the work as described in
13 an application for a permit and the construction documents substantially conform to the
14 requirements of this code and other pertinent laws and ordinances and that the fees specified in
15 the Fee Subtitle have been paid, the code official shall issue a permit to the applicant. When the
16 permit is issued, the applicant or the applicant's authorized agent becomes the permit holder.

17
18 **117.1.3 Compliance with approved plans and permit.** When the code official issues a permit,
19 the code official shall endorse the permit in writing or in electronic format and stamp the plans
20 "APPROVED." Such approved plans and permit shall not be changed, modified or altered
21 without authorization from the code official, and all work shall be done in accordance with the
22 approved construction documents and permit except as the code official may require during field
23 inspection to correct errors or omissions.
24

1 **117.2 Amendments to the permit.** When changes to the approved work are made during
2 construction, approval of the code official shall be obtained prior to execution. The building or
3 mechanical inspector may approve minor changes for work not reducing the structural strength or
4 fire and life safety of the structure. The building or mechanical inspector shall determine if it is
5 necessary to revise the approved construction documents. If revised plans are required, changes
6 shall be shown on two sets of plans that shall be submitted to and approved by the code official,
7 accompanied by appropriate fees as specified in the Fee Subtitle prior to occupancy. All changes
8 shall conform to the requirements of this code and other pertinent laws and ordinances and other
9 issued permits.
10

11 Minor changes shall not incur additional fees if these changes do not (1) add to the general
12 scope of work; (2) change the basic design concept; (3) involve major relocation of equipment,
13 ducts, or pipes; (4) substantially alter approved equipment size; or (5) require extensive re-review
14 of the plans and specifications.
15

16 **117.3 Cancellation of permit applications.** Applications may be cancelled if no permit is
17 issued by the earlier of the following: (1) twelve months following the date of application; or (2)
18 sixty days after the date of written notice that the permit is ready to be issued. After cancellation,
19 construction documents may be returned to the applicant or destroyed by the code official.
20

21 The code official shall notify the applicant in writing at least 30 days before the application is
22 cancelled. The notice shall specify a date by which a request for extension must be submitted in
23 order to avoid cancellation. The date shall be at least two weeks prior to the date on which the
24 application will be cancelled.
25
26

1 **117.4 Extensions prior to permit issuance.** At the discretion of the code official, applications
2 for projects that require more than 12 months to review and approve may be extended for a
3 period that provides reasonable time to complete the review and approval, but in no case longer
4 than 24 months from the date of the original application. No application may be extended more
5 than once. After cancellation, the applicant shall submit a new application and pay a new fee to
6 restart the application process.
7

8 Notwithstanding other provisions of this code, applications may be extended where issuance
9 of the permit is delayed by litigation, preparation of environmental impact statements, appeals,
10 strikes or other causes related to the application that are beyond the applicant's control, or while
11 the applicant is making progress toward issuance of a master use permit.
12

13 **117.5 Retention of plans.** One set of approved plans, which may be on microfilm or in
14 electronic format, shall be retained by the code official. One set of approved plans shall be
15 returned to the applicant and shall be kept at the site of the building or work for use by the
16 inspection personnel at all times when the work authorized is in progress.
17

18 **117.6 Validity of permit.** The issuance or granting of a permit or approval of construction
19 documents shall:

- 20 1. not be construed to be a permit for, or an approval of, any violation of any of the provisions of
21 this code or other pertinent laws and ordinances.
22
23 2. not prevent the code official from requiring the correction of errors in the construction
24 documents, or from preventing building operations being carried on thereunder when in violation
25 of this code or of other pertinent laws and ordinances of the City.
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1 3. not prevent the code official from requiring correction of conditions found to be in violation of
2 this code or other pertinent laws and ordinances of the City, or

3 4. not be construed to extend the period of time for which any such permit is issued or otherwise
4 affect any period of time for compliance specified in any notice or order issued by the code
5 official or other administrative authority requiring the correction of any such conditions.
6

7 **117.7 Permit expiration.** Authority to do the work authorized by a permit or a renewed permit
8 expires eighteen months from the date of issuance.

9 **Exceptions:**

10 1. Initial permits for major construction projects that require more than 18 months to complete,
11 according to a construction schedule submitted by the applicant, may be issued for a period that
12 provides reasonable time to complete the work but in no case longer than three years.
13

14 2. The code official may issue permits that expire in less than 18 months if the code official
15 determines a shorter period is appropriate to complete the work.
16

17 **117.8 Renewal of permits.** Permits may be renewed and renewed permits may be further
18 renewed by the code official, if the following conditions are met:

19 1. Application for renewal is made within the 30 day period immediately preceding the date of
20 expiration of the permit;

21 2. If the project has had an associated discretionary Land Use review, and the land use approval
22 has not expired per Seattle Municipal Code 23.76. 032; and
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3. If an application for renewal is made either more than 18 months after the date of mandatory compliance with a new or revised edition of this code or after the effective date of an amendment to applicable provisions of the Land Use Code, the permit shall not be renewed unless:

3.1 The code official determines that the permit complies, or is modified to comply with the code or codes in effect on the date of application renewal; or

3.2 The work authorized by the permit is substantially underway and progressing at a rate approved by the building official. "Substantially underway" means that work such as excavation, inspections, and installation of framing, electrical, mechanical and finish work is being completed on a continuing basis; and

4. Commencement or completion of the work authorized by the permit is delayed by litigation, appeals, strikes or other causes related to the work authorized by the permit, beyond the permit holder's control if application for renewal is made within the 30 day period immediately preceding the date of expiration of the permit.

117.9 Reestablishment. A new permit is required to complete work if a permit has expired and was not renewed.

Exception: A permit that expired less than one year prior to the date of a request for reestablishment may be reestablished upon approval of the code official if it complies with Items 2 and 3 or Item 4 of Section 117.8.

117.10 Revocation of mechanical permits.

117.10.1. Notice of revocation. Whenever the code official determines there are grounds for revoking a permit, the code official may issue a notice of revocation. The notice of revocation

1 shall identify the reason for the proposed revocation, including the violations, the conditions
2 violated, and any alleged false or misleading information provided.

3 **117.10.2 Standards for revocation.** The code official may revoke a permit if:

- 4 1. The code or the permit has been or is being violated and issuance of a notice of violation or
5 stop work order has been or would be ineffective to secure compliance because of circumstances
6 related to the violation; or
7
8 2. The permit was obtained with false or misleading information.

9 **117.10.3 Service of notice of revocation.** The notice of revocation shall be served on the owner
10 of the property on which the work is occurring, the holder of a permit if different than the owner,
11 and the person doing or causing the work to be done. The notice of revocation shall be served in
12 the manner set forth in RCW 4.28.080 for service of a summons or sent by first class mail to the
13 last known address of the responsible party. For purposes of this section, service is complete at
14 the time of personal service, or if mailed, three days after the date of mailing. When the last day
15 of the period so computed is a Saturday, Sunday or city holiday, the period runs until 5 p.m. on
16 the next business day.
17
18

19 **117.10.4 Effective date of revocation.** The code official shall identify in the notice of
20 revocation a date certain on which the revocation will take effect. This date may be stayed
21 pending review by the code official pursuant to Section 117.10.5.
22

23 **117.10.5 Review by the code official for notice of revocation.**

24 **117.10.5.1 Request for review.** Any person aggrieved by a notice of revocation may obtain a
25 review by making a request in writing to the code official within three business days of the date
26

of service of the notice of revocation. The review shall occur within five business days after receipt by the code official of the request for review. Any person affected by the notice of revocation may submit additional information to the code official for consideration as part of the review at any time prior to the review.

117.10.5.2 Conduct of review. The review will be made by a representative of the code official who will review all additional information received and may also request a site visit. After the review, the code official may:

1. Sustain the notice of revocation and affirm or modify the date the revocation will take effect;
 2. Withdraw the notice of revocation;
 3. Modify the notice of revocation and affirm or modify the date the revocation will take effect;
- or
4. Continue the review to a date certain.

117.10.5.2 Order of revocation of permit. The code official shall issue an order of the code official containing the decision within ten days after the review and shall cause the same to be sent by first class mail to the person or persons requesting the review, any other person on whom the notice of revocation was served, and any other person who requested a copy before issuance of the order.

SECTION 118

FEES

118.1 Fees. A fee for each mechanical permit and for other activities related to the enforcement of this code shall be paid as set forth in the Fee Subtitle.

SECTION 119

INSPECTIONS

119.1 General. All construction or work for which a permit is required is subject to inspection by the code official, and certain types of construction shall have special inspections by registered special inspectors specified in Chapter 17 of the *International Building Code*.

119.2 Inspection requests. The owner of the property or the owner's authorized agent, or the person designated by the owner/agent to do the work authorized by a permit shall notify the code official that work requiring inspection as specified in this section and Section 120 is ready for inspection.

119.3 Access for inspection. The permit holder and of the person requesting any inspections required by this code shall provide access to and means for proper inspection of such work, including safety equipment required by the Washington Industrial Safety and Health Agency. The work shall remain accessible and exposed for inspection purposes until approved by the code official. Neither the code official nor the City shall be liable for expense entailed in the required removal or replacement of any material to allow inspection.

119.4 Inspection record. Work requiring a mechanical permit shall not be commenced until the permit holder or the permit holder's agent has posted an inspection record in a conspicuous place on the premises and in a position that allows the code official to conveniently make the required entries regarding inspection of the work. This record shall be maintained in such a position by the permit holder or the permit holder's agent until final approval has been granted by the code official.

1 **119.5 Approvals required.** No work shall be done on any part of the building or structure
2 beyond the point indicated in each successive inspection without first obtaining the written
3 approval of the code official. Written approval shall be given only after an inspection has been
4 made of each successive step in the construction as indicated by each of the inspections required
5 in this code.

6 **119.5.1 Effect of approval.** Approval as a result of an inspection is not approval of any
7 violation of the provisions of this code or of other pertinent laws and ordinances of the City.
8 Inspections presuming to give authority to violate or cancel the provisions of this code or of other
9 pertinent laws and ordinances of the City are not valid.
10

11 **119.6 Final inspection.** When the installation of a mechanical system is complete, an additional
12 and final inspection shall be made.

13 **119.7 Operation of mechanical equipment.** The requirements of this section do not prohibit the
14 operation of any mechanical systems installed to replace existing equipment or fixtures serving
15 an occupied portion of the building in the event a request for inspection of such equipment or
16 fixture has been filed with the code official not more than 48 hours after such replacement work
17 is completed, and before any portion of such mechanical system is concealed by any permanent
18 portion of the building.
19

20 **119.8 Testing of equipment and systems.** Refrigeration equipment regulated by this code shall
21 be tested and approved as required by Chapter 11 of this code. Fuel-oil piping shall be tested and
22 approved as required by Chapter 13 of this code.
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1 **119.9 Other inspections.** In addition to the “called” inspections specified above, the code
2 official may make or require any other inspections of any mechanical work to ascertain
3 compliance with the provisions of this code and other laws and ordinances that are enforced by
4 the code official.

5 **119.10 Special investigation.** If work for which a permit or approval is required is commenced
6 or performed prior to making formal application and receiving the code official’s permission to
7 proceed, the code official may make a special investigation inspection before a permit is issued
8 for the work. If a special investigation is made, a special investigation fee may be assessed in
9 accordance with the Fee Subtitle.
10

11 **119.11 Reinspections.** The code official may require a reinspection if work for which inspection
12 is called is not complete, corrections required are not made, the inspection record is not properly
13 posted on the work site, the approved plans are not readily available to the inspector, access is
14 not provided on the date for which inspection is requested, if deviations from construction
15 documents that require the approval of the code official have been made without proper approval,
16 or as otherwise required by the code official.
17

18 **119.11.1 Compliance with Section 104.4.** For the purpose of determining compliance with
19 Section 104.4, Maintenance, the code official or the fire chief may cause any structure or system
20 to be reinspected.
21

22 **119.1.2 Reinspection fee.** The code official may assess a reinspection fee as set forth in the Fee
23 Subtitle for any action for which reinspection is required. In instances where reinspection fees
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1 have been assessed, no additional inspection of the work will be performed until the required fees
2 have been paid.

3 SECTION 120

4 CONNECTION APPROVAL

5 **120.1 Energy connections.** No person shall make connections from a source of energy fuel to a
6 mechanical system or equipment regulated by this code for which a permit is required until
7 approved by the code official.
8

9 **120.2 Temporary connections.** The code official may authorize temporary connection of the
10 mechanical equipment to the source of energy fuel for the purpose of testing the equipment, or
11 for use under a temporary certificate of occupancy.
12

13 Section 3. The following sections of Chapter 2 of the International Fuel Gas Code, 2009
14 Edition, are amended as follows:

15 CHAPTER 2

16 DEFINITIONS

17 SECTION 201 (IFGC)

18 GENERAL

19 ***
20

21 **201.3 Terms defined in other codes.** Where terms are not defined in this code and are defined
22 in the *International Building Code*, *International Fire Code*, *International Mechanical Code* or
23 ~~((International))~~ *Uniform Plumbing Code*, ~~((such))~~ the terms ~~((shall))~~ have meanings ascribed to
24 them ~~((as))~~ in those codes.
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201.5 References to other codes. Whenever an International, National or Uniform Code is referenced in this code, it means the Seattle edition of that code, including local amendments. References to the “Building Code”, “Mechanical Code”, “Fire Code”, “Residential Code” and “Plumbing Code” mean the Seattle editions of those codes.

SECTION 202 (IFGC)

GENERAL DEFINITIONS

BOILER~~((, LOW PRESSURE))~~. A self-contained *appliance* for supplying steam or hot water.

~~((Hot water heating boiler. A boiler in which no steam is generated, from which hot water is circulated for heating purposes and then returned to the boiler, and that operates at water pressures not exceeding 160 pounds per square inch gauge (psig) (1100 kPa gauge) and at water temperatures not exceeding 250°F (121°C) at or near the boiler outlet.~~

~~Hot water supply boiler. A boiler, completely filled with water, which furnishes hot water to be used externally to itself, and that operates at water pressures not exceeding 160 psig (1100 kPa gauge) and at water temperatures not exceeding 250°F (121°C) at or near the boiler outlet.~~

~~Steam heating boiler. A boiler in which steam is generated and that operates at a steam pressure not exceeding 15 psig (100 kPa gauge).)~~

BOILER CODE. *The Seattle Boiler and Pressure Vessel Code.*

CODE. These regulations, subsequent amendments thereto or any emergency rule or regulation that ~~((the administrative authority having jurisdiction))~~ has been lawfully adopted.

CODE OFFICIAL. The ~~((officer or other designated authority charged with the administration and enforcement of this code,))~~ Director of the Department of Planning and Development or a duly authorized representative.

ENERGY CODE. *The Washington State Energy Code with Seattle Amendments.*

PERSON. Any individual, receiver, administrator, executor, assignee, trustee in bankruptcy, trust, estate, firm, partnership, joint venture, club, company, joint stock company, business trust, municipal corporation, political subdivision of the State of Washington, corporation, limited liability company, association, society or any group of individuals acting as a unit, whether mutual, cooperative, fraternal, nonprofit or otherwise, and the United States or any instrumentality thereof.

UNSAFE. Constituting a fire or health hazard or otherwise dangerous to human life,
constituting a hazard to safety, health or public welfare by reason of inadequate maintenance,
dilapidation, obsolescence, fire hazard, disaster, damage or abandonment.

WATER HEATER. Any heating *appliance or equipment*, not exceeding a pressure of 160 psi
(1103 kPa), a volume of 120 gallons (454 L) and a heat input of 200,000 Btu/h (58.6 kW), that
heats potable water and supplies such water to the potable hot water distribution system.

Section 4. The following sections of Chapter 3 of the International Fuel Gas Code, 2009
Edition, are amended as follows:

CHAPTER 3

GENERAL REGULATIONS

SECTION 301 (IFGC)

GENERAL

301.2 Energy utilization. Heating, ventilating and air-conditioning systems of all structures shall
be designed and installed for efficient utilization of energy in accordance with the ~~((*International*~~
~~*Energy Conservation Code*))~~ *Washington State Energy Code with Seattle Amendments.*

301.6 Plumbing connections. Potable water supply and building drainage system connections to appliances regulated by this code shall be in accordance with the ((*International*)) Uniform Plumbing Code.

SECTION 303 (IFGC)

APPLIANCE LOCATION

303.7 Pit locations. Appliances installed in pits or excavations shall not come in direct contact with the surrounding soil. The sides of the pit or excavation shall be held back a minimum of 12 inches (305 mm) from the *appliance*, and minimum of 30 inches (762 mm) on the control side.

Where the depth exceeds 12 inches (305 mm) below adjoining grade, the walls of the pit or excavation shall be lined with concrete or masonry, such concrete or masonry shall extend a minimum of 4 inches (102 mm) above adjoining grade and shall have sufficient lateral load-bearing capacity to resist collapse. The *appliance* shall be protected from flooding in an *approved* manner.

[B] 303.8 Installation of pipes or ducts conveying gases, vapors or liquids in hoistways, machine rooms or machinery spaces. Pipes and ducts conveying gases, vapors or liquids are not permitted to be installed in hoistways, machine rooms and machinery spaces.

Exceptions:

1. Only ducts for heating, cooling, ventilating and venting these spaces are permitted to be installed in the hoistway, machine room and machinery space.

2. Ducts and electrical conduit may pass through an elevator machine room or machinery space provided they are separated from the room or space by construction equal to the rated construction of the room or space and located so that all required clearances are maintained.

If a vented machine room is not vented directly to the outside of the building, the vent shall be enclosed within a fire barrier with at least a one-hour fire-resistance rating, or as required for shafts where it passes through occupied floors.

3. Standard sprinkler protection conforming to the requirements of NFPA 13 shall be permitted to be installed in these spaces, subject to rules promulgated by the code official.

4. Subject to the approval of the code official, pipes protected with double containment and pipes with threaded or welded joints may be permitted. Pipes shall not be located less than 7 feet (2134 mm) above the floor in machine rooms.

[B] 303.9 Exit Enclosures. Mechanical systems shall not be located in exit enclosures.

Penetrations passing entirely through both protective membranes are prohibited.

Exceptions:

1. Equipment allowed or required by the *International Building Code* to serve the exit enclosure, such as ductwork and equipment necessary for independent stairway pressurization, sprinkler piping, standpipes, electrical conduit terminating in a listed box not exceeding 16 square inches (10 323 mm²) in area and piping used exclusively for the drainage of rainfall runoff from roof areas provided the roof shall not be used for a helistop or heliport.

2. Unfired heaters allowed by the *International Building Code* for freeze protection of fire protection equipment may penetrate one protective membrane. The conduit serving the heater may penetrate both protective membranes. Penetrations and communicating openings between exit enclosures in the same building are not permitted regardless of their protection. Penetrations shall be protected as required by the *International Building Code*.

SECTION 306 (IFGC)

ACCESS AND SERVICE SPACE

[M] 306.3 Appliances in attics. Attics containing appliances shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest *appliance*. The passageway shall not be less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 20 feet (6096 mm) in length measured along the centerline of the passageway from the opening to the *appliance*. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) wide. A level service space not less than 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the *appliance*. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), and large enough to allow removal of the largest *appliance*.

Exceptions:

1. The passageway and level service space are not required where the *appliance* is capable of being serviced and removed through the required opening.

2. Where the passageway is not less than 6 feet (1829 mm) high for its entire length, the passageway shall be not greater than 50 feet (15 250 mm) in length.

[M] 306.3.1 Electrical requirements. A luminaire controlled by a switch located at the required passageway opening and a receptacle outlet shall be provided at or near the *appliance* location in accordance with ((~~NEPA 70~~)) the Seattle Electrical Code.

[M] 306.4 Appliances under floors. Under-floor spaces containing appliances shall be provided with an *access* opening and unobstructed passageway large enough to remove the largest *appliance*. The passageway shall not be less than 30 inches (762 mm) high and 22 inches (559 mm) wide, nor more than 20 feet (6096 mm) in length measured along the centerline of the passageway from the opening to the *appliance*. A level service space not less than 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the *appliance*. If the depth of the passageway or the service space exceeds 12 inches (305 mm) below the adjoining grade, the walls of the passageway shall be lined with concrete or masonry extending 4 inches (102 mm) above the adjoining grade and having sufficient lateral-bearing capacity to resist collapse. The clear *access* opening dimensions shall be a minimum of 22 inches by 30 inches (559mm by 762 mm), and large enough to allow removal of the largest *appliance*.

Exceptions:

1. The passageway is not required where the level service space is present when the *access* is open and the *appliance* is capable of being serviced and removed through the required opening.

2. Where the passageway is not less than 6 feet high (1829 mm) for its entire length, the passageway shall not be limited in length.

1 **[M] 306.4.1 Electrical requirements.** A luminaire controlled by a switch located at the required
2 passageway opening and a receptacle outlet shall be provided at or near the *appliance* location in
3 accordance with ((NFPA 70)) the Seattle Electrical Code.

4 **[M] 306.5 Equipment and appliances on roofs or elevated structures.** Where *equipment*
5 requiring *access* and appliances are installed on roofs or elevated structures at a height exceeding
6 16 feet (4877 mm), such *access* shall be provided by a permanent *approved* means of *access*, the
7 extent of which shall be from grade or floor level to the *equipment* and appliances' level service
8 space. Such *access* shall not require climbing over obstructions greater than 30 inches (762 mm)
9 high or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-
10 percent slope). Where *access* involves climbing over parapet walls, the height shall be measured
11 to the top of the parapet wall.
12

13
14 Permanent ladders installed to provide the required *access* shall comply with the following
15 minimum design criteria:

- 16 1. The side railing shall extend above the parapet or roof edge not less than 30 inches (762 mm).
- 17 2. Ladders shall have rung spacing not to exceed 14 inches (356 mm) on center.
- 18 3. Ladders shall have a toe spacing not less than 6 inches (152 mm) deep.
- 19 4. There shall be a minimum of 18 inches (457 mm) between rails.
- 20 5. Rungs shall have a minimum 0.75-inch (19 mm) diameter and be capable of withstanding a
21 300-pound (136.1 kg) load.
- 22 6. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings
23 capable of withstanding 100 pounds per square foot (488.2 kg/m²). Landing dimensions shall be
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not less than 18 inches (457 mm) and not less than the width of the ladder served. A guardrail shall be provided on all open sides of the landing.

7. Ladders shall be protected against corrosion by *approved* means.

Catwalks installed to provide the required *access* shall be not less than 24 inches (610 mm) wide and shall have railings as required for service platforms.

Exception: This section shall not apply to Group R-3 occupancies.

[M] 306.5.1 Sloped roofs. Where appliances, *equipment*, fans or other components that require service are installed on a roof having a slope of 3 units vertical in 12 units horizontal (25-percent slope) or greater and having an edge more than 30 inches (762 mm) above grade at such edge, a level platform shall be provided on each side of the *appliance* or *equipment* to which *access* is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the *International Building Code*. *Access* shall not require walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). Where *access* involves obstructions greater than 30 inches (762 mm) in height, such obstructions shall be provided with ladders installed in accordance with Section 306.5 or stairs installed in accordance with the requirements specified in the *International Building Code* in the path of travel to and from appliances, fans or *equipment* requiring service.

[M] 306.5.2 Electrical requirements. A receptacle outlet shall be provided at or near the
appliance location in accordance with ((NFPA-70)) the Seattle Electrical Code.

SECTION 309 (IFGC)

ELECTRICAL

309.2 Connections. Electrical connections between appliances and the building wiring,
including the grounding of the appliances, shall conform to ((NFPA-70)) the Seattle Electrical
Code.

Section 5. The following sections of Chapter 4 of the International Fuel Gas Code, 2009
Edition, are amended as follows:

CHAPTER 4

GAS PIPING INSTALLATIONS

SECTION 402 (IFGS)

PIPE SIZING

402.3 Sizing. Gas *pipng* shall be sized in accordance with one of the following:

1. Pipe sizing tables or sizing equations in accordance with Section 402.4.
2. The sizing tables included in a *listed piping* system's manufacturer's installation instructions.

3. Other *approved* engineering methods.

402.4 Sizing tables and equations. Where Tables 402.4(1) through 402.4(35) are used to size *pipng* or tubing, the pipe length shall be determined in accordance with Section 402.4.1, 402.4.2 or 402.4.3.

Where Equations 4-1 and 4-2 are used to size *pipng* or tubing, the pipe or tubing shall have smooth inside walls and the pipe length shall be determined in accordance with Section 402.4.1, 402.4.2 or 402.4.3. Before Equations 4-1 or 4-2 are permitted to be used, plans stamped by a registered design professional shall be submitted and approved by the code official.

1. Low-pressure gas equation [Less than 11/2 pounds per square inch (psi) (10.3 kPa)]:

$$D = \frac{Q^{0.381}}{1917 \left(\frac{\Delta H}{C_r \times L} \right)^{0.206}} \quad \text{(Equation 4-1)}$$

2. High-pressure gas equation [11/2 psi (10.3 kPa) and above]:

$$D = \frac{Q^{0.381}}{18.93 \left[\frac{(P_1^2 - P_2^2) \times Y}{C_r \times L} \right]^{0.206}} \quad \text{(Equation 4-2)}$$

where:

D = Inside diameter of pipe, inches (mm).

Q = Input rate *appliance(s)*, cubic feet per hour at 60°F (16°C) and 30-inch mercury column.

P_1 = Upstream pressure, psia ($P_1 + 14.7$).

1 P_2 = Downstream pressure, psia ($P_2 + 14.7$).

2 L = Equivalent length of pipe, feet.

3 ΔH = Pressure drop, inch water column (27.7 inch water column = 1 psi).

4 **402.4.1 Longest length method.** The pipe size of each section of gas *piping* shall be determined
5 using the longest length of *piping* from the *point of delivery* to the most remote *outlet* and the
6 load of the section.
7

8 **402.4.2 Branch length method.** Pipe shall be sized as follows:

9 1. Pipe size of each section of the longest pipe run from the *point of delivery* to the most remote
10 *outlet* shall be determined using the longest run of *piping* and the load of the section.
11

12 2. The pipe size of each section of branch *piping* not previously sized shall be determined using
13 the length of *piping* from the *point of delivery* to the most remote *outlet* in each branch and the
14 load of the section.

15 **402.4.3 Hybrid pressure.** The pipe size for each section of higher pressure gas *piping* shall be
16 determined using the longest length of *piping* from the *point of delivery* to the most remote line
17 pressure regulator. The pipe size from the line pressure regulator to each *outlet* shall be
18 determined using the length of *piping* from the regulator to the most remote *outlet* served by the
19 regulator.
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23 **402.6 Maximum design operating pressure.** The maximum design operating pressure for
24 *piping* systems located inside buildings shall not exceed 5 pounds per square inch gauge (psig)
25 (34 kPa gauge) except where one or more of the following conditions are met:
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1. The *piping* system is welded.
2. The *piping* is located in a ventilated chase or otherwise enclosed for protection against accidental gas accumulation.
3. The *piping* is located inside buildings or separate areas of buildings used exclusively for:
 - 3.1. Industrial processing or heating;
 - 3.2. Research;
 - 3.3. Warehousing; or
 - 3.4. Boiler or mechanical rooms.
4. The *piping* is a temporary installation for buildings under construction.
5. The piping serves appliances or *equipment* used for agricultural purposes.
6. The *piping* system is an LP-gas *piping* system with a design operating pressure greater than 20 psi (137.9 kPa) and complies with NFPA 58.

Plans for piping systems over 5 psig (34.5 kPa) shall be designed by an engineer licensed to practice in the State of Washington, and shall not be installed until approved by the code official.

402.6.1 Liquefied petroleum gas systems. LP-gas systems designed to operate below -5°F (-21°C) or with butane or a propane-butane mix shall be designed to either accommodate liquid LP-gas or prevent LP-gas vapor from condensing into a liquid.

SECTION 403 (IFGS)

PIPING MATERIALS

403.7 Workmanship and defects. Pipe, tubing and fittings shall be clear and free from cutting burrs and defects in structure or threading, and shall be thoroughly brushed, and chip and scale blown.

Defects in pipe, tubing and fittings shall not be repaired. Defective pipe, tubing and fittings shall be replaced (see Section 406.1.2).

No gas piping shall be strained or pinched, and no appliance shall be supported by, or develop any strain or stress on its supply piping.

403.10 Metallic piping joints and fittings. The type of *piping* joint used shall be suitable for the pressure-temperature conditions and shall be selected giving consideration to joint tightness and mechanical strength under the service conditions. The joint shall be able to sustain the maximum end force caused by the internal pressure and any additional forces caused by temperature expansion or contraction, vibration, fatigue or the weight of the pipe and its contents.

403.10.1 Pipe joints. Pipe joints shall be threaded, flanged, brazed or welded. Where nonferrous pipe is brazed, the brazing materials shall have a melting point in excess of 1,000°F (538°C).

Brazing alloys shall not contain more than 0.05-percent phosphorus.

403.10.1.1 Welding. All welding in the piping system shall be done in accordance with ASME Boiler and Pressure Vessel Code Section IX.

403.10.2 Tubing joints. Tubing joints shall be made with *approved* gas tubing fittings, brazed with a material having a melting point in excess of 1,000°F (538°C) or made with press-connect

fittings complying with ANSI LC-4. Brazing alloys shall not contain more than 0.05-percent phosphorus.

403.10.3 Flared joints. Flared joints shall be used only in systems constructed from nonferrous pipe and tubing where experience or tests have demonstrated that the joint is suitable for the conditions and where provisions are made in the design to prevent separation of the joints.

403.10.4 Metallic fittings. Metallic fittings shall comply with the following:

1. Threaded fittings in sizes larger than 4 inches (102 mm) shall not be used except where *approved*.

2. Fittings used with steel or wrought-iron pipe shall be steel, brass, bronze, malleable iron or cast iron.

3. Fittings used with copper or brass pipe shall be copper, brass or bronze.

4. Fittings used with aluminum-alloy pipe shall be of aluminum alloy.

5. Cast-iron fittings:

5.1. Flanges shall be permitted.

5.2. Bushings shall not be used.

5.3. Fittings shall not be used in systems containing flammable gas-air mixtures.

5.4. Fittings in sizes 4 inches (102 mm) and larger shall not be used indoors except where *approved*.

5.5. Fittings in sizes 6 inches (152 mm) and larger shall not be used except where *approved*.

6. Aluminum-alloy fittings. Threads shall not form the joint seal.

7. Zinc aluminum-alloy fittings. Fittings shall not be used in systems containing flammable gas-air mixtures.

8. Special fittings. Fittings such as couplings, proprietary-type joints, saddle tees, gland-type compression fittings, and flared, flareless or compression-type tubing fittings shall be: used within the fitting manufacturer's pressure-temperature recommendations; used within the service conditions anticipated with respect to vibration, fatigue, thermal expansion or contraction; installed or braced to prevent separation of the joint by gas pressure or external physical damage; and shall be *approved*.

SECTION 406 (IFGS)

INSPECTION, TESTING AND PURGING

406.1 General. Prior to acceptance and initial operation, all *pipng* installations shall be inspected and pressure tested to determine that the materials, design, fabrication and installation practices comply with the requirements of this code.

406.1.1 Inspections. Inspection shall consist of visual examination((,)) during or after manufacture, fabrication, assembly or pressure tests as appropriate. Supplementary types of nondestructive inspection techniques, such as magnetic- particle, radiographic, ultrasonic, etc., shall not be required unless specifically *listed* herein or in the engineering design.

406.1.2 Repairs and additions. In the event repairs or additions are made after the pressure test, the affected *pipng* shall be tested.

1 Minor repairs and additions, as determined by the code official, are not required to be pressure
2 tested provided that the work is inspected and connections are tested with a noncorrosive leak-
3 detecting fluid or other *approved* leak-detecting methods.

4 **406.1.3 New branches.** Where new branches are installed to new appliances, only the newly
5 installed branches shall be required to be pressure tested. Connections between the new *piping*
6 and the existing *piping* shall be tested with a noncorrosive leak-detecting fluid or other *approved*
7 leak-detecting methods.
8

9 **406.1.4 Section testing.** A *piping* system shall be permitted to be tested as a complete unit or in
10 sections. Under no circumstances shall a valve in a line be used as a bulkhead between gas in one
11 section of the *piping* system and test medium in an adjacent section, unless two valves are
12 installed in series with a valved “telltale” located between these valves. A valve shall not be
13 subjected to the test pressure unless it can be determined that the valve, including the valve-
14 closing mechanism, is designed to safely withstand the test pressure.
15

16 **406.1.5 Regulators and valve assemblies.** Regulator and valve assemblies fabricated
17 independently of the *piping* system in which they are to be installed shall be permitted to be
18 tested with inert gas or air at the time of fabrication.
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21 SECTION 413 (IFGC)

22 COMPRESSED NATURAL GAS MOTOR VEHICLE FUEL-DISPENSING FACILITIES

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1 **[F] 413.9 Discharge of CNG from motor vehicle fuel storage containers.** The discharge of
2 CNG from motor vehicle fuel cylinders for the purposes of maintenance, cylinder certification,
3 calibration of dispensers or other activities shall be in accordance with this section. The discharge
4 of CNG from motor vehicle fuel cylinders shall be accomplished through a closed transfer
5 system or an *approved* method of atmospheric venting in accordance with Section 413.9.1 or
6 413.9.2.
7

8 **[F] 413.9.1 Closed transfer system.** A documented procedure which explains the logical
9 sequence for discharging the cylinder shall be provided to the code official for review and
10 approval. The procedure shall include what actions the operator will take in the event of a low-
11 pressure or high-pressure natural gas release during the discharging activity. A drawing
12 illustrating the arrangement of *pipng*, regulators and *equipment* settings shall be provided to the
13 code official for review and approval. The drawing shall illustrate the *pipng* and regulator
14 arrangement and shall be shown in spatial relation to the location of the compressor, storage
15 vessels and emergency shutdown devices.
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18 **[F] 413.9.2 Atmospheric venting.** Atmospheric venting of motor vehicle fuel cylinders shall be
19 in accordance with Sections 413.9.2.1 through 413.9.2.6.

20 **[F] 413.9.2.1 Plans and specifications.** A drawing illustrating the location of the vessel support,
21 *pipng*, the method of grounding and bonding, and other requirements specified herein shall be
22 provided to the code official for review and approval.
23

24 **[F] 413.9.2.2 Cylinder stability.** A method of rigidly supporting the vessel during the venting of
25 CNG shall be provided. The selected method shall provide not less than two points of support
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1 and shall prevent the horizontal and lateral movement of the vessel. The system shall be designed
2 to prevent the movement of the vessel based on the highest gas-release velocity through valve
3 orifices at the vessel's rated pressure and volume. The structure or appurtenance shall be
4 constructed of noncombustible materials.

5 **[F] 413.9.2.3 Separation.** The structure or appurtenance used for stabilizing the cylinder shall be
6 separated from the site *equipment*, features and exposures and shall be located in accordance with
7 Table 413.9.2.3.
8

9 **[F] 413.9.2.4 Grounding and bonding.** The structure or appurtenance used for supporting the
10 cylinder shall be grounded in accordance with ((~~NEPA-70~~)) the *Seattle Electrical Code*. The
11 cylinder valve shall be bonded prior to the commencement of venting operations.
12

13 **[F] 413.9.2.5 Vent tube.** A vent tube that will divert the gas flow to the atmosphere shall be
14 installed on the cylinder prior to the commencement of the venting and purging operation. The
15 vent tube shall be constructed of pipe or tubing materials *approved* for use with CNG in
16 accordance with the *International Fire Code*. The vent tube shall be capable of dispersing the gas
17 a minimum of 10 feet (3048 mm) above grade level. The vent tube shall not be provided with a
18 rain cap or other feature which would limit or obstruct the gas flow. At the connection fitting of
19 the vent tube and the CNG cylinder, a *listed* bidirectional detonation flame arrester shall be
20 provided.
21

22 **[F] 413.9.2.6 Signage.** Approved NO SMOKING signs shall be posted within 10 feet (3048 mm)
23 of the cylinder support structure or appurtenance. *Approved* CYLINDER SHALL BE BONDED
24 signs shall be posted on the cylinder support structure or appurtenance.
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Section 6. The following sections of Chapter 6 of the International Fuel Gas Code, 2009 Edition, are amended as follows:

CHAPTER 6

SPECIFIC APPLIANCES

SECTION 614 (IFGC)

CLOTHES DRYER EXHAUST

[M] 614.2 Duct penetrations. Ducts that exhaust clothes dryers shall not penetrate or be located within any fireblocking, draftstopping or any wall, floor/ceiling or other assembly required by the *International Building Code* to be fire-resistance rated, unless such duct is constructed of galvanized steel or aluminum of the thickness specified in Table 603.4 of the *International Mechanical Code* and the fire-resistance rating is maintained in accordance with the *International Building Code*. Fire dampers shall not be installed in clothes dryer exhaust duct systems.

614.2.1 Protection required. Protective shield plates shall be placed where nails or screws from finish or other work are likely to penetrate the clothes dryer exhaust duct. Shield plates shall be placed on the finished face of all framing members where there is less than 1 1/4 inches (32 mm) between the duct and the finished face of the framing member. Protective shield plates shall be

constructed of steel, shall have a minimum thickness of 0.062 inch (1.6 mm) and shall extend a minimum of 2 inches (51 mm) above sole plates and below top plates.

[M] 614.6 Domestic clothes dryer exhaust ducts. Exhaust ducts for domestic clothes dryers shall conform to the requirements of Sections 614.6.1 through 614.6.7.

[M] 614.6.1 Material and size. Exhaust ducts shall have a smooth interior finish and shall be constructed of metal a minimum 0.016 inch (0.4 mm) thick. The exhaust duct size shall be 4 inches (102 mm) nominal in diameter.

[M] 614.6.2 Duct installation. Exhaust ducts shall be supported at 4-foot (1219 mm) intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct.

~~((614.6.3 Protection required. Protective shield plates shall be placed where nails or screws from finish or other work are likely to penetrate the clothes dryer exhaust duct. Shield plates shall be placed on the finished face of all framing members where there is less than 1 1/4 inches (32 mm) between the duct and the finished face of the framing member. Protective shield plates shall be constructed of steel, shall have a minimum thickness of 0.062 inch (1.6 mm) and shall extend a minimum of 2 inches (51 mm) above sole plates and below top plates.))~~

[M] 614.6.4 Transition ducts. Transition ducts used to connect the dryer to the exhaust duct system shall be a single length that is *listed* and *labeled* in accordance with UL 2158A.

Transition ducts shall be a maximum of 8 feet (2438 mm) in length, and shall not be concealed within construction.

[M] 614.6.5 Duct length. The maximum allowable exhaust duct length shall be determined by one of the methods specified in Section 614.6.5.1 or 614.6.5.2.

[M] 614.6.5.1 Specified length. The maximum length of the exhaust duct shall be 35 feet (10 668 mm) from the connection to the transition duct from the dryer to the outlet terminal. Where fittings are utilized, the maximum length of the exhaust duct shall be reduced in accordance with Table 614.6.5.1.

[M] 614.6.5.2 Manufacturer's instructions. The maximum length of the exhaust duct shall be determined by the dryer manufacturer's installation instructions. The code official shall be provided with a copy of the installation instructions for the make and model of the dryer. Where the exhaust duct is to be concealed, the installation instructions shall be provided to the code official prior to the concealment inspection. In the absence of fitting equivalent length calculations from the clothes dryer manufacturer, Table 614.6.5.1 shall be utilized.

Exception: The maximum length of the duct may be increased in an engineered exhaust system when a listed and labeled dryer exhaust booster fan is installed in accordance with the manufacturer's installation instructions.

[M] 614.6.6 Length identification. Where the exhaust duct is concealed within the building construction, the equivalent length of the exhaust duct shall be identified on a permanent label or tag. The label or tag shall be located within 6 feet (1829 mm) of the exhaust duct connection.

[M] 614.6.7 Exhaust duct required. Where space for a clothes dryer is provided, an exhaust duct system shall be installed. Where the clothes dryer is not installed at the time of occupancy, the exhaust duct shall be capped at the location of the future dryer.

Exception: Where a *listed* condensing clothes dryer is installed prior to occupancy of the structure.

SECTION 624 (IFGC)

WATER HEATERS

624.1 General. Water heaters shall be ~~((tested in accordance with ANSI Z 21.10.1 and ANSI Z 21.10.3 and shall be installed in accordance with the manufacturer's installation instructions~~
~~Water heaters utilizing fuels other than fuel gas shall be regulated by the *International Mechanical Code*.~~

~~**624.1.1 Installation requirements.** The requirements for water heaters relative to sizing, relief valves, drain pans and scald protection shall be in accordance with the *International Plumbing Code*.~~

~~**624.2 Water heaters utilized for space heating.** Water heaters utilized both to supply potable hot water and provide hot water for space heating applications shall be *listed* and *labeled* for such applications by the manufacturer and shall be installed in accordance with the manufacturer's installation instructions and the *International*)) installed in accordance with the *Uniform Plumbing Code* and *Seattle Electrical Code*.~~

SECTION 631 (IFGC)

BOILERS

631.1 ((Standards.)) General. Boilers shall comply with the Seattle Boiler and Pressure Vessel Code. ~~((be listed in accordance with the requirements of ANSI Z21.13 or UL 795. If applicable, the boiler shall be designed and constructed in accordance with the requirements of ASME CSD-1 and as applicable, the ASME Boiler and Pressure Vessel Code, Sections I, II, IV, V and IX and NFPA 85.~~

631.2 ~~Installation.~~ ~~In addition to the requirements of this code, the installation of boilers shall be in accordance with the manufacturer's instructions and the *International Mechanical Code*. Operating instructions of a permanent type shall be attached to the boiler. Boilers shall have all controls set, adjusted and tested by the installer. A complete control diagram together with complete boiler operating instructions shall be furnished by the installer. The manufacturer's rating data and the nameplate shall be attached to the boiler.~~

631.3 ~~Clearance to combustible materials.~~ ~~Clearances to combustible materials shall be in accordance with Section 308.4.))~~

SECTION 632 (IFGC)

RESERVED

~~((EQUIPMENT INSTALLED IN EXISTING UNLISTED BOILERS~~

632.1 ~~General.~~ ~~Gas equipment installed in existing unlisted boilers shall comply with Section 631.1 and shall be installed in accordance with the manufacturer's instructions and the *International Mechanical Code*.))~~

Section 7. The following sections of Chapter 7 of the International Fuel Gas Code, 2009 Edition, are amended as follows:

CHAPTER 7
GASEOUS HYDROGEN SYSTEMS

SECTION 703 (IFGC)

GENERAL REQUIREMENTS

[F] 703.6 Electrical wiring and equipment. Electrical wiring and *equipment* shall comply with ~~((NFPA 70))~~ the Seattle Electrical Code.

Section 8. The provisions of this ordinance are declared to be separate and severable. The invalidity of any clause, sentence, paragraph, subdivision, section or portion of this ordinance, or the invalidity of the application thereof to any person, owner, or circumstance shall not affect the validity of the remainder of this ordinance, or the validity of its application to other persons, owners, or circumstances.

Section 9. Sections 2-8 of Ordinance 122532 are repealed.

Section 10. For a period of 60 days following the effective date of this ordinance, the Director may also accept and thereafter approve applications that are designed to comply with either the requirements of this Ordinance or the requirements of Ordinance 122532.

Section 9. This ordinance shall take effect and be in force 30 days from and after its approval by the Mayor, but if not approved and returned by the Mayor within ten days after presentation, it shall take effect as provided by Seattle Municipal Code Section 1.04.020.

Passed by the City Council the ____ day of _____, 2010, and signed by me in open session in authentication of its passage this ____ day of _____, 2010.

President _____ of the City Council

Approved by me this ____ day of _____, 2010.

Michael McGinn, Mayor

Filed by me this ____ day of _____, 2010.

City Clerk

(Seal)